

Abstract

The invention relates to a flame-retardant mixture for lignocellulose composites comprising from 60 to 90% by mass of particulate and/or fibrous lignocellulose materials and from 40 to 10% by mass of a flame retardant concentrate immobilized on and/or in the particulate and/or fibrous lignocellulose materials as carriers and consisting of flame retardants of the type consisting of boric acids and/or the salts thereof, melamine resins and optionally synergistic agents and further additives, the flame retardants being present chemically coupled to the melamine resins, and the flame retardant concentrates being present immobilized on and/or in the carrier substance of the particulate and/or fibrous lignocellulose materials as carriers. The preparation of the flame-retardant mixture can be effected by a liquid impregnation process, a melt impregnation process and a liquid impregnation/solids mixing process. Flameproofed lignocellulose composites can be produced by melt processing of mixtures of from 40 to 95% by mass of flame retardant and from 60 to 5% by mass of thermosetting prepolymers with curing of the thermosetting plastics. In the form of flame-retardant semifinished products and molding materials, the lignocellulose composites have high resistance to insect infestation, fungal infestation and mold infestation and high resistance to washing out of the flame-retardant mixture and are preferably suitable for applications in outdoor use in the building and leisure sector.